IN THE UNITED STATES PATENT & TRADEMARK OFFICE

U.S. APPLICATION

SN 10/740,486

Art Unit: 2625

Filed: December 22, 2003

Examiner: Singh

Inventors: Robert A. VANDERHYE

FOR: PRODUCING ARTWORK USING COLOR PRINTERS

February 28, 2008

Hon. Comm. Of Patents & Trademarks P O Box 1450 Alexandria, VA 22313-1450

NOTICE OF APPEAL AND APPEAL BRIEF

Responsive to the Advisory Action of February 6, 2008, and the Final Rejection of December 27, 2007, applicant hereby presents a notice of appeal of the rejections of claims 1, 3, 5-17, and 20-25, and files his appeal brief contemporaneously herewith.

(i) REAL PARTY IN INTEREST

The Real Party in interest is the inventor Robert A. Vanderhye

(ii) RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any appeal or interference that will directly affect or be directly affected by or have a bearing on any decision in this case.

(iii) STATUS OF CLAIMS

Claims 1, 3, 5-17, and 20-25 are pending. Claims 2, 4, 18 & 19 have been cancelled. No claims are allowed. The rejections of all of claims 1, 3, 5-17, and 20-25 are being appealed.

(iv) STATUS OF AMENDMENTS

No amendment has been made since the date of the Final Rejection, although the Request for Reconsideration filed December 31, 2007 was considered, as indicated by the Advisory Action of February 6, 2008.

(v) SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 1: This claim calls for a method of producing a piece of artwork [18, Figures 1 & 9; Figure 21; page 8, 2nd & 3rd full paragraphs; page 14, 1st & 2nd full paragraphs; page 19, 1st & 2nd full paragraphs] using a computer-controlled color printer [12, Figures 2-4] capable of printing at least three colors [page 2, lines 17-18; Abstract, line 3], comprising: a) Inputting or selecting [10, Fig. 1; 67, Fig. 10] a multicolor image [9, Figures 3, 5A] so that it is provided in the computer [11, Figs. 2 & 3]. b) Selectively disabling one or more of the colors [13, Fig. 1; 41, Fig. 5A; 66, 73, Fig. 10], while not disabling all of the colors besides black, of the printer to insure little or none of the one or more disabled colors is printed by the printer. c) With the printer, printing [15, Fig. 1; 70, Fig. 10] the non-disabled color or colors of the image onto a substrate [14, Fig. 1, paragraph bridging pages 7 & 8]. And then d) acting [17, Fig. 1; page 8, 2nd full paragraph; page 19, 2nd full paragraph; Abstract, lines 11-14] upon the substrate from c) to add artistic elements to the substrate to produce an artwork [18; Fig. 21].

Independent claim 20: This claim calls for a method of producing a work of art [18; Fig. 21] using a thermal ink-jet printer [12; page 9, line 3] having an active black ink cartridge [29, Figs. 3 & 4, page 9, line 9 – page 10, line 15] and at least one active primary color ink cartridge [28], and controlled by a computer [11, Figs. 2 & 3], comprising: a) Inputting or selecting a multicolor image so that it is provided in the computer [same as a) in claim 1]. b) Removing [paragraph bridging pages 9 & 10; sentence bridging pages 13 & 14; Abstract, line 17] the active black ink cartridge from the printer, or controlling the printer with software [Figures 5, 5A; Fig. 10], to disable from about 80-100% [page 12, last two lines; page 13, lines 10-11; page 19, penultimate paragraph] the capability of the printer to print black and near black [page 11, lines 14-27] while not significantly disturbing operation of the active primary colors cartridge. c) With the printer, printing a substantially accurate representation of the image [see Fig. 7], but without about 80-100% of the black and near black, onto a substrate of paper or canvas. And d) further acting upon the

substrate from c) to add artistic elements to the substrate to produce an artwork [same as d) of claim 1].

Independent claim 24: This claim calls for a method of teaching art to children [page 1, lines 22-26; page 3, lines 26-27; page 19, lines 15-20] using a computer-controlled printer [12] capable of printing at least three colors [Abstract, line 3], comprising: a) Inputting or selecting a multicolor image so that it is provided in the computer [same as a) of claim 1]. b) Selectively disabling one or more of the colors, while not disabling all of the colors besides black, of the printer to insure little or none of the one or more disabled colors is printed by the printer [same as b) of claim 1]. c) With the printer, printing the non-disabled color or colors of the image onto a substrate [same as c) of claim 1]. And d) instructing the children [page 19, lines 15-20] to manually act upon the substrate from c) to manually add artistic elements [17; page 8, lines 6-28] to the substrate to produce an artwork [18; Fig. 21].

(vi) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 3, 5-10, 12-17 and 20-25 are rejected under 35 USC 103(a) as being unptatentable over Abram et al (US 2002/0003631).

Claim 11 is rejected under 35 USC 103(a) as being unpatentable over Abram et al [hereafter "Abram"] in view of Kohno (USP 6749282).

(vii) ARGUMENT

Claims 1, 3, 5-10, 12-17 and 20-25 are not properly rejected as obvious over Abram

Reconsideration is respectfully requested of the rejection of all of the pending claims based upon Abram. The Abram reference essentially has nothing to do with the claimed invention, and it is respectfully submitted that the majority of the statements made in the final rejection about the Abram reference simply are incorrect and/or based upon speculation of what Abram might show, not what it inherently shows.

Independent claims 1 and 24 call for a method of producing a piece of art work using a computer controlled color printer capable of printing a least three colors. One or more of the colors are selectively disabled, while NOT disabling all of the colors besides

black. With the printer the non-disabled colors of the image are printed onto a substrate. Claim 24 teaches children art using the techniques of the invention. Independent claim 20 uses an ink jet printer having at least a black and one color cartridge, using the ink jet printer to print a substantially accurate representation of an image input into a computer, but without about 80-100% of the black and near black of the image.

That Abram does not have even the most basic aspects of the invention is clear form an inspection thereof. NOWHERE within Abram do the following words (or their equivalent) appear: child or children; teach (except "teachings of the invention", irrelevant); learn; art (except "those skilled in the art" or "line-art", both irrelevant); artwork; manual; disable; black; near; thermal; ink; or jet. Abram doesn't use these words, which are relevant to the claimed invention, because they are irrelevant to Abram since Abram is not only far afield from the invention, but actually contrary to it.

Abram nowhere teaches producing a piece of artwork using a computer controlled color printer capable of printing at least three colors. No portion of the Abram disclosure which allegedly discloses such a printer is indicated in any way in the final rejection, and in fact none exists. Rather all the printer in Abram does is print a line art image such as illustrated at 805 or 820 in figure 8. The line art merely provides an outline, likely in black (though Abram doesn't say). No color is involved. As a matter of fact as described in paragraph 0028 on page 2, and as emphasized by claim 40 of Abram, when a color is sampled the printer typically prints an index number with the name of the corresponding sampled color together with the coloring book image. There would be no reason to print an index number if the color itself was being printed. The line art images of Abram are simply that, lines, likely printed in black.

The above-mentioned disclosures in Abram are completely consistent with producing a coloring book. As is well-known, and as judicial notice may be taken of, a coloring book does not have colors. The colors are provided by the user.

In the advisory action, the complete deficiency of Abram is attempted to be remedied by citing (nowhere referenced in the final rejection) paragraph [0031] of Abram, which references Figure 3 and element 350 thereof, "Color Samples". This does not assist in teaching even the most basic features of the invention.

Firstly, paragraph [0031] nowhere says that a printer capable of printing at least three colors is provided. Everything that is stated in this paragraph could conceivably be done with two colors.

Secondly, and even more important, only optional "samples" are printed. That is, there is no retention of the real colors covering all areas of the image one begins with, rather only small suggestions [i. e. "samples"] of colors that may be used are provided. About midway of [0031] of Abram it is stated: "Color samples 350 represent the paletted colors of image areas of the original digital image."

Third, there is no suggestion for "disabling" anything in Abram. Rather, the optional color samples are <u>added</u> to the otherwise plain, un-colored, line art. For example compare the green water lily leaves of the artwork of Figure 21 of the instant application with a color sample of green printed in a line art drawing.

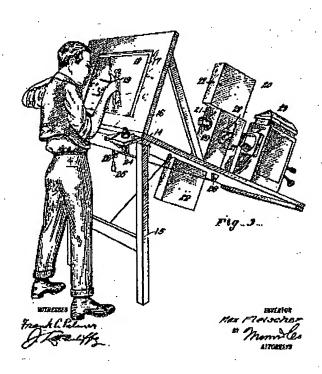
Fourth, the revisionist interpretation of Abram in the advisory action goes against everything in the final rejection, where it is alleged that manual coloring is key to what Abram does – and if the line art is already colored, there is of course no reason for manual coloring. The final rejection wants to take judicial notice of the use of coloring books, but then doesn't want to take the necessary additional judicial notice that coloring books don't have the colors printed in them, only black outlines.

Thus Abram clearly does not disclose even the most basic feature of independent claims 1 and 24, namely a computer-controlled printer capable of printing at least three colors, and not disabling all of the colors besides black (that is Abram does not even remotely suggest the particular printer, or b) or c), of claims 1 & 24). Nor does Abram have even the most remote suggestion of not printing black or near-black as set forth in independent claim 20 (that is Abram does not even remotely suggest b) sand c) of claim 20).

The Abram disclosure is also vastly different from the claimed invention in that it requires the utilization of rotoscoping techniques. The line art image is rendered from the digital image -- as indicated at 910 in figure 9 -- by "any well-known rotoscoping technique" (paragraph [0025] of Abram). Rotoscoping has nothing to do with the claimed invention.

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Rotoscoping was invented by Max Fleischer around 1915. The following image is from figure 3 of Fleischer's original patent, as reproduced from Wikipedia.com. As Fleischer invented it, rotoscoping consisted of projecting each movie frame onto a frosted glass easel from which an illustrator traced and redrew the image. (See the definition of rotoscoping at www.Tech web.com, copy attached to the request for reconsideration).



US patent 6061462 discloses a digital rotoscoping process. As disclosed by that patent, it is clear that the line art drawing produced in the rotoscoping process is not in any way done by disabling colors, or printing more than one color. Rather if an image is

to be colored, it is done in a separate step (see block 18 in figure 1 of the 6061462 patent).

There is simply nothing in figure 9, or paragraphs 25, 29, 31, 38, 39, or 40, of Abram [the only specific portions of Abram mentioned in the final rejection or advisory action] which provides any relationship to the use of the particular color printer of claims 1 and 24, or the selective disabling and printing steps of claims 1 and 24, or the particular black and near black disabling of claim 20.

Further with respect to independent claim 20, the statement in paragraph 19 bridging pages 5 and 6 of the final rejection is simply erroneous. There is no place in Abram where a thermal inkjet printer having an active black inkjet cartridge and a least one active primary color inkjet cartridge is provided. Specifically there is nothing in paragraphs 25 or 29, or in figure 9, or in paragraphs 38 to 40, of Abram than in any way mentions a thermal inkjet printer let alone one with the specific cartridges suggested in paragraph 19. It is respectfully submitted that all of the comments in paragraph 19 are simply made up. Absolutely no feature of claim 20 is shown in Abram et al.

An apology for the deficiencies of Abram with respect to showing an ink jet cartridge is made in paragraph 4 of the advisory action by referencing the Abram generic teaching of "any standard printing process". But the teaching of a genus does not necessarily teach all species within that genus [see *In re Luvisi*, 144 USPQ 646, 650 (CCPA 1965)]. However even if it did, Abram is totally devoid of any suggestion whatsoever of the following from claim 20: "b) removing the active black ink cartridge from the printer, or controlling the printer with software, to disable from about 80-100% the capability of the printer to print black and near black while not significantly disturbing operation of the active primary colors cartridge; c) with the printer, printing a substantially accurate representation of the image, but without about 80-100% of the black and near black, onto a substrate". Clearly not only is there no mention of "black" or "near black" in Abram, but not printing black for line art would be contrary to Abram's teachings; and the printing of "color samples" is clearly not printing of "a substantially accurate representation

of the image, but without about 80-100% of the black and near black" as recited in claim 20!

The situation with respect to claim 20 (and claim 25) again illustrates the failure of the final rejection to make correct statements about Abram. In paragraphs 19 and 24 of the final rejection when discussing claims 20 and 25, reference is made to Figure 9, S910-920 and paragraphs [0038]-[0039] of Abram in the discussion of disabling 80-100% of the black and near black of the original image. However, this figure and paragraphs have NOTHING WHATSOEVER to do with not printing black and near black of the image while otherwise printing a substantially accurate representation thereof, with the other colors not disabled. The referenced portions of Abram merely relate to forming the (ostensibly black) line-art, exactly contrary to what occurs when practicing the invention.

Throughout the final rejection, Abram is relied upon because it is allegedly possible that it "might" show certain features; that is that certain features are "inherent" in Abram. However, "Inherent anticipation requires that the missing descriptive material is `necessarily present,' not merely probably or possibly present, in the prior art." *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) (quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)). Therefore, the entire approach in the final rejection is misplaced because almost all features of the invention are not inherent in Abram's rotoscoping coloring book production.

Not only does Abram not show most of the mentioned features of the claimed invention, Abram is exactly contrary to the invention and is incapable of functioning as the claimed invention functions. For example, one of the main techniques utilized according to the invention -- which is illustrated in the color drawings of figures 6 through 9 of the instant application -- comprises removing black and near black from a digital image, otherwise left undisturbed. What that does leaves all the colored portions without clear lines of demarcation, providing the pseudo-abstract art of figures 7 and 9. Also see figure 21 of the instant application, which perhaps even more clearly illustrates this aspect of the invention. This is exactly opposite of what is provided according to the

coloring book of Abram et al, wherein ostensibly black outlines (line art) are provided and the colors removed (with the optional provision of color "samples").

Not only does Abram have the enormous deficiencies with respect to claims 1, 20, 24 and 25 discussed above, it is totally deficient with respect to most of the rest of the claims, all of which are dependent upon claims 1 or 20. For example, conventional coloring books are not "colored" in as set forth in claims 6, 21 and/or 23; nor is only partial disabling of one or more colors as set forth in claim 8 anywhere suggested by Abram. Certainly black and near black are not disabled (see the discussion of claims 20 and 25 above) as set forth in claims 9, 14 and 15. Nor is there a teaching of using a thermal ink jet printer as set forth in claim 10 (see the discussion of claim 20 above). Nor is pseudo-abstract art ever produced, as set forth in claims 13 and 15, but rather only line art in coloring books. Abram also has no mention whatsoever of using the method of claim 1 in a curriculum to teach art to children, as recited in claim 16, and there is no reason for Abram to use, or any advantage in using, at least 30 lb. matte paper, which claim 22 calls for.

Not only does Abram not teach, suggest, or have, any of the numerous features set forth above, it clearly would not be *prima facie* obvious to modify Abram to provide these missing features. There is absolutely no basis whatsoever by which one of ordinary skill in the art would seek to modify Abram to provide the invention. Abram does not deal with the same proximate problem as the invention (see *In re Pye*, 148 USPQ 426, 429 (CCPA 1966)), does not achieve the advantages of producing distinctive works of art as does the invention (see *In re Gordon*, 221 USPQ 1125, 1127 (Fed Cir 1984)), nor even envision that the invention is possible (see *In re Luvisi*, *supra*).

When a claim is evaluated under 35 USC §103 the significant inquiry is whether the subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made. *Graham v John Deere*, 383 US 1, 14 (1956), *In re Dembiczak*, 175 F.3d 994, 999 (Fed Cir 1999). The burden is on the PTO to provide the factual basis for obviousness, not on an applicant to prove non-obviousness. *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 177-8 (CCPA 1967). Here the final rejection does not provide that factual basis. And as *In re Pye, supra, In re Gordon*,

supra, and In re Luvisi, supra, make clear, the fact that the art is not concerned with the same proximate problem as the invention, does not achieve the advantageous artwork according to the invention, and does not even suggest specific critical elements of the invention, clearly indicates no obviousness.

Perhaps even more significant regarding obviousness, Abram has teachings exactly contrary to the invention, as discussed above (as only one example, not disabling black or near black while printing an otherwise substantially accurate representation of the colored image from the computer). When a reference teaches away from the invention there IS NO obvious modification. *KSR v Teleflex Inc.*, 550 U. S. 1 (2007); *In re Hedges*, 783 F.2d 1038, 1041, 228 USPQ 685, 687 (Fed Cir 1986).

Thus, all of claims 1, 3, 5-10, 12-17 and 20-25 are clearly patentable.

Claim 11 is not properly rejected as obvious over Abram in view of Kohno

Kohno does not remedy the deficiencies of Abram as far as teaching what is recited in claims 1 & 10 (from which claim 11 depends) is concerned, therefore even if Kohno is combined with Abram the claimed invention does not ensue.

Further, Kohno is totally irrelevant. Kohno merely discloses the general concept of an ink jet printer. In the inkjet printer of Kohno, which has primary power-turn-on means for physically supplying power to the printer and secondary power-turn-on means for bringing the printer into a state where functions are enabled, ink consumption due to a suction recovery processing is reduced. The number of times that the secondary power supply is on is counted. The count value is stored in a non-volatile memory. It is judged whether the count value is above a predetermined value when the secondary power supply becomes on, if yes, the recovery processing is executed. The count value and the contents of the memory are then cleared. The counting is prohibited till primary power supply is off. As the above contents is retained even after the primary power supply is off, necessity of recovery processing when the secondary power supply becomes on is judged based on the state before the primary power supply was off.

The invention of claim 11 has no relationship to any of the above. Therefore, Kohno has no relevance to the invention except that it shows that ink jet printers with

cartridges exist, something of course clearly admitted in applicant's specification since it is a new use of such a printer that claim 11 of the invention contemplates. Kohno certainly has no teaching of printing while removing the black ink cartridge, which claim 11 calls for. In fact every aspect of Kohno seems to require the conventional insertion of a black ink cartridge when printing. Thus Kohno is contrary to the claimed invention, and therefore there can be no obviousness. KSR v Teleflex Inc., supra; In re Hedges, supra.

Nor is there a *prima facie* case of obviousness of a combination of Abram and Kohno. There is no problem Abram has that Kohno solves, nor any problem of either relevant to the claimed invention. No one of ordinary skill in the art has any reason whatsoever to combine these very diverse references.

Claim 11 is clearly patentable.

CONCLUSION

All of the claims are in clear condition for allowance. Therefore, early reversal of the Final Rejection, and passage of the application to issue, are earnestly solicited.

Respectfully Submitted,

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Appendix A – Claims on Appeal

- 1. A method of producing a piece of artwork using a computer-controlled color printer capable of printing at least three colors, comprising:
- a) inputting or selecting a multicolor image so that it is provided in the computer;
- b) selectively disabling one or more of the colors, while not disabling all of the colors besides black, of the printer to insure little or none of the one or more disabled colors is printed by the printer;
- c) with the printer, printing the non-disabled color or colors of the image onto a substrate; and then
- d) acting upon the substrate from c) to add artistic elements to the substrate to produce an artwork.
- 3. A method as recited in claim 1 wherein c) is practiced by printing onto a substrate of paper or canvas.
- 5. A method as recited in claim 1 wherein d) is practiced by manually applying colored paints to spaced portions of the substrate from c).
- 6. A method as recited in claim 5 wherein d) is practiced by manually applying texture to spaced portions of the substrate using a palette knife, eye-dropper, or the like.
- 7. A method as recited in 1 wherein b) is practiced to fully disable one or more colors.
- 8. A method as recited in 1 wherein b) is practiced to only partially disable one or more colors.
- 9. A method as recited in 1 wherein b) is practiced to disable black and near black.
- 10. A method as recited in 1 wherein c) is practiced using a thermal ink-jet printer.
- 11. A method as recited in claim 10 wherein c) is further practiced using an inkjet printer having a black ink cartridge as well as at least one primary color ink cartridge;

and wherein b) is practiced by removing the active black ink cartridge from the printer to thereby disable printing with black ink.

- 12. A method as recited in 1 wherein the multicolor image of a) is a digital photograph, and d) is practiced to manually act on the substrate.
- 13. A method as recited in claim 12 wherein the digital photograph is taken by an artist and input into the computer by the artist; and wherein a)-d) are practiced to produce a pseudo-abstract final art work.
- 14. A method as recited in claim 13 wherein b) is practiced to disable black and near black.
- 15. A piece of paper or canvas comprising a pseudo-abstract art work produced by practicing the method of claim 14.
- 16. A method as recited in claim 1 used in a curriculum to teach art to children.
- 17. A method as recited in claim 1 wherein b) is practiced using software in a computer controlling a printer.
- 20. A method of producing a work of art using a thermal ink-jet printer having an active black ink cartridge and at least one active primary color ink cartridge, and controlled by a computer, comprising:
- a) inputting or selecting a multicolor image so that it is provided in the computer;
- b) removing the active black ink cartridge from the printer, or controlling the printer with software, to disable from about 80-100% the capability of the printer to print black and near black while not significantly disturbing operation of the active primary colors cartridge;
- c) with the printer, printing a substantially accurate representation of the image, but without about 80-100% of the black and near black, onto a substrate of paper or canvas; and
- d) further acting upon the substrate from c) to add artistic elements to the substrate to produce an artwork.

- 22. A method as recited in claim 20 wherein c) is practiced so that the substrate is at least thirty pound matte paper, and wherein a) is practiced using a digital color photograph as the image.
- 23. A method as recited in claim 5 wherein d) is further practiced by adding illustrated objects, foreign materials, or effects, to spaced portions of the substrate.
- 24. A method of teaching art to children using a computer-controlled printer capable of printing at least three colors, comprising:
- a) inputting or selecting a multicolor image so that it is provided in the computer;
- b) selectively disabling one or more of the colors, while not disabling all of the colors besides black, of the printer to insure little or none of the one or more disabled colors is printed by the printer;
- c) with the printer, printing the non-disabled color or colors of the image onto a substrate; and
- d) instructing the children to manually act upon the substrate from c) to manually add artistic elements to the substrate to produce an artwork.
- 25. A method as recited in claim 24 wherein b) is practiced to disable from about 80-100% the capability of the printer to print black and near black.

<u>APPENDIX B – EVIDENCE APPENDIX.</u>

The evidence previously presented and to be considered by the Board are Figure 3 of Max Fleischer's original patent on rotoscoping, the definition of rotoscoping from www.techweb.com, and U S Patent 6061462. All of these are provided in association with the Request for Reconsideration of December 31, 2007, which was acknowledged by the Advisory Action of February 6, 2008.

RELATED PROCEEDINGS APPENDIX

None.